REMARKS

This response is intended as a full and complete response to the Final Office Action dated June 16, 2006. In view of the following discussion, the Applicants believe that all claims are in allowable form.

AMENDMENT TO CLAIM 18

Claim 18 has been amended to more clearly identify the metal layer.

CLAIM REJECTIONS

A. 35 U.S.C. §102 (b) or (e) Claims 1, 10-18 and 25

Claims 1, 10-18 and 25 stand rejected as anticipated Applicants' admitted prior art (*AAPR*). The Applicants respectfully disagree with respect to claim 1, and have amended claims 10, 15 and 25 to more clearly recite certain aspects of the invention.

Independent claims 1, 10, 15 and 25, recites elements not taught, shown or suggested by *AAPR*. As noted by the Examiner on page 2 of the office action, the conventional method of etching a photomask substrate may include measuring critical dimensions of elements of photomask substrate that have already been etched (*e.g.*, a previous batch of substrates). In contrast, the invention of claims 1, 10, 15 and 25 specifically recite that pre-etched dimensions are measured on a unique photomask substrate which is subsequently etched (*i.e.*, the same unique photomask substrate is measured, then etched). Thus, the *AAPR* does not teach or suggest measuring pre-etch critical dimensions of a printed pattern on a photomask substrate, modifying an etch recipe based on the measured pre-etch critical dimension data of the photomask substrate, and etching the photomask substrate, as recited by claims 1, 10, and 15. Furthermore, conventional method does not teach or suggest etching features according to an etch recipe modified based on measured pre-etch critical dimensions by an integrated measuring tool, measuring the features to determine conformity with the specified critical dimensions by the integrated measuring tool, determining from the measurement the modifications of the etch recipe required to conform to the specified

critical dimensions, and etching another photomask substrate according to the modified etch recipe, as recited by claim 25.

The Examiner asserts that the measurements of the conventional method as described in the specification must be acquired through some integrated measuring tool. The Applicants submit that the conventional method described by the Applicants is silent as to how or where the measurement procedure is performed. "Statically processing the results of the measurements" as stated in the specification does not teach or suggest the measurement is performed by tool integrated with the etching system as claimed and as described in the present application.

The Applicants submit that "anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim." *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)(citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983). Here, as conventional method as stated in the specification fails to teach or suggest each and every element of the claimed invention and thus, a *prima facie* case of anticipation is not established.

Thus, the Applicants submit that independent claims 1, 10, 15 and 25 and all claims depending therefrom, are patentable over *AAPR*. Accordingly, the Applicants respectfully request the rejection be withdrawn.

B. 35 U.S.C. §103(a) Claims 2-9

Claims 2-9 stand rejected as being unpatentable over *AAPR*. In response, the Applicants have amended claim 1 to more clearly recite certain aspects of the invention.

Independent claim 1 recites elements not taught, shown or suggested by *AAPR*. The patentability of independent claim 1 over *AAPR* has been discussed above Therefore, as discussed above, the described conventional method in the specification does not teach or suggest measuring pre-etch critical dimensions of a printed pattern on a photomask substrate, and modifying an etch recipe based on the measured pre-etch critical dimension data of said photomask substrate, as recited by claims 1, and

modifying the initial etch recipe for a next photomask substrate based on a post-etch critical dimensions data, as further recited by claim 2. The Examiner asserts that it is obvious to one skilled in the art to analyze data to look for error after each wafer is done and the Examiner further states that the claim does not specify the wafer is within a batch. However, claim 2 does not recite a method of batch processing.

Specifically, claim 1 recites that pre-etched measurement information from a unique photomask substrate is used to measured, then etched using a recipe modified in response to the measured data. Claim 2 further recites that the etched unique photomask substrate is measured after etching, and that measured information is utilized to modify the process for the next photomask substrate. Thus, the claimed invention is not about batch processing.

In contrast, conventional practices use batch data to modify processes performed on subsequent batches. Thus, the conventional practices do not realize the benefit from adjusting etch processes to accommodate for substrate to substrate variation because there is no feed forward of pre-etched measurement data for use in modifying an etch process performed in the measured substrate, or a feed back of post-etch measurement date for use in modifying an etch process performed next substrate processed after the measured substrate, as claimed by the Applicants.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 U.S.P.Q. 1941 (Fed. Cir. 1992); M.P.E.P. §2143.01. Moreover, the mere fact that the references could be modified to have produced the claimed invention is not evidence of obviousness unless the references suggest the desirability of the modification. *In re Fritch*, 23 U.S.P.Q. 2d 1780, 1783 (Fed. Cir. 1992), *In re Gordon*, 221 U.S.P.Q. 2d 1125, 1127 (Fed. Cir. 1984). In the present application, the conventional method as described in the specification describes a method to determine an etch recipe to be adjusted for

subsequent batch substrate process. However, the conventional method as described does not teach or suggest modifying an etch recipe based on measured pre-etch critical dimension data of a photomask substrate, and performing an etch process on the photomask substrate based on the modified etch recipe to form an etched pattern on said photomask substrate as recited by claim 1. There is no suggestion of desirability in the described conventional method in the specification to motivate such modification. As such, a *prima facie* of obviousness has not been established as the conventional method described by the Applicants fails to teach each claimed elements.

Thus, the Applicants submit that independent claim 1, and claims 2-9 depending therefrom, are patentable over *AAPR*. Accordingly, the Applicants respectfully request the rejection be withdrawn.

CONCLUSION

Thus, for at least the reasons discussed above, the Applicants submit that all claims now pending are in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issuance are earnestly solicited.

If, however, the Examiner believes that any unresolved issues still exist, it is requested that the Examiner telephone Mr. Keith Taboada at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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